

Title (en)  
Hybrid wiggler

Title (de)  
Hybrid-Wiggler

Title (fr)  
Wiggler hybride

Publication  
**EP 0941019 A2 19990908 (EN)**

Application  
**EP 99400398 A 19990218**

Priority  
JP 5081898 A 19980303

Abstract (en)  
Disclosed is a novel hybrid wiggler as a kind of insertion devices, for example, in an electron accelerator. Different from a conventional hybrid wiggler consisting of two oppositely facing arrays each formed of an alternate arrangement of a plurality of permanent magnet blocks and a plurality of pole pieces of a soft magnetic material to generate a sine-curved periodical magnetic field in the gap space between the arrays to cause meandering of electron beams, each of the pole pieces is sandwiched on the lateral surfaces with a pair of auxiliary permanent magnet blocks so that the periodical magnetic field generated in the gap space can be greatly strengthened. <IMAGE>

IPC 1-7  
**H05H 7/04**

IPC 8 full level  
**G21K 1/093** (2006.01); **H05H 7/04** (2006.01); **H05H 13/04** (2006.01)

CPC (source: EP KR US)  
**G21K 1/093** (2013.01 - KR); **H05H 7/04** (2013.01 - EP KR US); **H05H 13/04** (2013.01 - KR)

Cited by  
JPH0597702A

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 0941019 A2 19990908; EP 0941019 A3 20001115; EP 0941019 B1 20060118**; CN 1172563 C 20041020; CN 1230092 A 19990929; DE 69929507 D1 20060406; DE 69929507 T2 20060810; JP 4021982 B2 20071212; JP H11251097 A 19990917; KR 100560601 B1 20060316; KR 19990077533 A 19991025; TW 409488 B 20001021; US 2002044579 A1 20020418; US 6556595 B2 20030429

DOCDB simple family (application)  
**EP 99400398 A 19990218**; CN 99102596 A 19990303; DE 69929507 T 19990218; JP 5081898 A 19980303; KR 19990006847 A 19990303; TW 88102780 A 19990224; US 25712099 A 19990225